

U.S. Patent Application Serial No. 10/692,865  
Response dated July 14, 2004  
Reply to Office Action of March 19, 2004

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-6 (Canceled)

Rewrite Claim 4 as new claims 7, 8 and 9 and rewrite Claim 6 as new claims 10, 11 and 12,  
as follows:

Claim 7 (new): A synchronous induction motor comprising:  
a stator equipped with a stator winding;  
a rotor which is secured to a rotating shaft and which rotates in the stator;  
a secondary conductor provided around the rotor yoke constituting the rotor; and  
a permanent magnet embedded in the rotor yoke,  
wherein a magnetic field produced by the permanent magnet does not pass through the  
rotating shaft; and  
comprising at least one void in the rotor yoke adjacent to the rotating shaft.

Claim 8 (new): A synchronous induction motor comprising:  
a stator equipped with a stator winding;  
a rotor which is secured to a rotating shaft and which rotates in the stator;

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a secondary conductor provided around the rotor yoke constituting the rotor; and  
a permanent magnet embedded in the rotor yoke,  
wherein a magnetic field produced by the permanent magnet bypasses the rotating shaft; and  
comprising at least one void in the rotor yoke adjacent to the rotating shaft.

Claim 9 (new): A synchronous induction motor comprising:  
a stator equipped with a stator winding;  
a rotor which is secured to a rotating shaft and which rotates in the stator;  
a secondary conductor provided around the rotor yoke constituting the rotor; and  
a permanent magnet embedded in the rotor yoke,  
wherein a magnetic field produced by the permanent magnet passes through only the rotor  
yoke, excluding the rotating shaft; and  
comprising at least one void in the rotor yoke adjacent to the rotating shaft.

Claim 10 (new): A synchronous induction motor comprising:  
a stator equipped with a stator winding;  
a rotor which is secured to a rotating shaft and which rotates in the stator;  
a secondary conductor provided around the rotor yoke constituting the rotor; and  
a permanent magnet embedded in the rotor yoke,

wherein a magnetic field produced by the permanent magnet does not pass through the rotating shaft; and

comprising secondary permanent magnets provided symmetrically about a line that connects two magnetic poles, wherein the secondary permanent magnets have lengths which are radially disposed, and wherein the secondary magnets are substantially adjacent to the rotating shaft.

Claim 11 (new): A synchronous induction motor comprising:

a stator equipped with a stator winding;

a rotor which is secured to a rotating shaft and which rotates in the stator;

a secondary conductor provided around the rotor yoke constituting the rotor; and

a permanent magnet embedded in the rotor yoke,

wherein a magnetic field produced by the permanent magnet bypasses the rotating shaft; and

comprising secondary permanent magnets provided symmetrically about a line that connects two magnetic poles, wherein the secondary permanent magnets have lengths which are radially disposed, and wherein the secondary magnets are substantially adjacent to the rotating shaft.

Claim 12 (new): A synchronous induction motor comprising:

a stator equipped with a stator winding;

a rotor which is secured to a rotating shaft and which rotates in the stator;

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a secondary conductor provided around the rotor yoke constituting the rotor; and

a permanent magnet embedded in the rotor yoke,

wherein a magnetic field produced by the permanent magnet passes through only the rotor yoke, excluding the rotating shaft; and

comprising secondary permanent magnets provided symmetrically about a line that connects two magnetic poles, wherein the secondary permanent magnets have lengths which are radially disposed, and wherein the secondary magnets are substantially adjacent to the rotating shaft.